

# **Honolulu High-Capacity Transit Corridor Project Alternatives Analysis**

## **Technical Memorandum #14 Trip Report – June 11–14, 2007**

**July 18, 2007**

Prepared for:  
City and County of Honolulu

by:  
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under subcontract to:  
Parsons Brinckerhoff Quade & Douglas, Inc.

From: Donald R Durkee  
To: Mark Scheibe, PBQD

Subject: TRIP REPORT

Dates: June 11-14, 2007  
Location: Honolulu HI

Matter: Honolulu High-Capacity Transit Corridor Project ("Project")  
Contract F54306 Task 2.4.2

**Purpose.** Travel to Honolulu to provide technical support to the Department of Transportation Services (DTS) prior to and during meetings with FTA's Project Management Oversight Consultant (PMOC). This memorandum summarizes the discussions during the meetings and identifies possible courses of action related to outstanding issues identified during the Project Delivery Workshop on June 12, 2007.

**PMOC PRE-Meeting June 11, 2:00pm – 4:00pm** A pre-meeting was held at the offices of InfraConsult, 1132 Bishop St., on two principal topics 1) General Engineering Consultant (GEC) solicitation, and 2) project delivery schedule. List of attendees attached.

GEC Solicitation. The Request for Qualifications (RFQ) for the GEC was issued on June 5, 2007. Responses are due on July 5, 2007. No major issues were raised on the RFQ.

Project Delivery. InfraConsult presented a preliminary schedule for project delivery based upon the Alternatives Analysis (AA). Questions were raised for the purpose of vetting key assumptions in anticipation of issues likely to be raised by the PMOC.

Three major issues were identified, 1) Added complexity in Preliminary Engineering (PE) because no vehicle technology was selected during AA, 2) direction of City officials that competitive pricing be a factor in technology selection, and 3) the multi-year gap between the award of Phase 1 contracts and contract awards for subsequent phases.

FTA Headquarters staff had advised the City that the FEIS must be based on a selected vehicle technology. The current timeline shows technology selection and identification of the technology supplier to be completed prior to commencing the FEIS. This is expected to increase the cost of PE to support the NEPA work, as analyses for the DEIS will have to be done for several potential technologies rather than only one. In addition, the City would need to obtain FTA approval to incur cost if the City intends to issue a notice-to-proceed to the selected technology supplier prior to the ROD. Failure to do so would make the resulting contract ineligible for FTA participation, and could potentially compromise the NEPA process.

Note: I recommend the City consider issuing a multi-year contract solicitation for technology (including options) in order to obtain the technical and cost data needed for the ROD, while conditioning performance on issuance of the ROD and selection of the related alternative.
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The First Project (20 miles) is expected to be built in stages, with a first stage or Phase 1 awarded as a six-mile design-build (DB) contract and the remainder awarded as Phase 2 under traditional design-bid-build methods. The project delivery schedule for design-bid-build is currently divided into multiple bid packages of four stations each on the basis of similar station characteristics; the Ala Moana Center station standing alone due to its unique characteristics.

The City's preliminary schedule shows FTA approval of a Letter of No Prejudice (LONP) concurrently with the ROD to allow the City to award a DB contract for Phase 1 prior to receipt of FTA authorization to advance the project into the Final Design (FD) and Construction phases of the New Starts process. Costs incurred within scope of an approved LONP would remain eligible as local match or reimbursable under the Full Funding Grant Agreement (FFGA) expected to be awarded by FTA.

Note: If FTA does not issue a LONP, the City must decide whether to award the DB contract as a separate minimum operable segment (MOS) without FTA participation, and apply for a FFGA for only Phase 2, the remaining fourteen miles of the First Project.

It is recommended that no action be taken on the DB contract for Phase 1 before the ROD is issued, which may invalidate the NEPA process and jeopardize FTA funding for Phase 2.

The schedule shows a significant lag in construction and operation between Phase 1 and Phase 2. This will complicate and likely increase the cost of the GEC, vehicle, and civil contracts. GEC staffing needed to oversee project delivery will drop substantially in the period between Phase 1 and the startup of Phase 2, creating potential difficulties in recruitment and retention of needed professionals, and resulting in increased staffing costs. It is expected that a full fixed guideway system will require 66 rail cars or equivalent carrying capacity. A minimum of 6-8 cars will be required for Phase 1 operations. The remaining 58-60 cars will not be needed for several years, leading to potential pricing risks for the vehicle manufacturer or early acceptance by the City, giving rise to related storage and warranty issues. Similar issues could arise in civil construction as multiple mobilizations would appear to be needed from the initiation of Phase 1 and the initiation of Phase 2.

### **June 12, 2007: RFQ Review and Project Delivery Workshop**

The workshop, conducted on behalf of FTA by the PMOC, Booz-Allen Hamilton (BAH), was held at the offices of InfraConsult, 1132 Bishop St.

The principal agenda items were 1) GEC solicitation, and 2) project delivery schedule. A list of attendees is attached.

GEC Solicitation. The City's project team made a presentation of the key elements of the GEC RFQ and answered questions raised by the PMOC. Areas were identified that need additional clarification in negotiation with the GEC. No addenda to the RFQ were proposed.

Project Delivery Workshop. InfraConsult provided an overview of the project delivery schedule, with the caveat that the plan is based on the AA and will undoubtedly be revised during PE.

The PMOC raised many of the same issues as in the pre-meeting of June 11.

An overriding concern of the PMOC is that the project delivery schedule appears driven by the City's decision to break ground by 2009, rather than an unconstrained estimate of the critical path, including expectations regarding advancement of the First Project through the FTA New Starts process. Use of a multi-year contract for vehicle procurement was further explored as a means of mitigating the issues arising under a single contract for 66 vehicles to be delivered over time. A number of ideas were discussed for closing the gap between Phase 1 and Phase 2, which will be explored in detail by the GEC when selected.

The FTA representative agreed to consult with agency officials on the likelihood of issuing an LONP. He also raised the concern that insufficient attention appears to be focused on the availability of resources given other major infrastructure projects planned in the state over the next decade and the impact on project costs if resources must be imported. InfraConsult indicated that this issue will be addressed by the GEC during PE.

Draft copies of the Project Management Plan (PMP) and Bus Fleet Management Plan (BMP) were provided to the PMOC for discussion on June 13.

### **June 13, 2007: Technical Capacity & Capability Workshop**

The PMOC team critiqued the initial drafts of the PMP and BMP, and made recommendations on sections, emphasizing the need to provide additional detail.

PMP. The document should include a sufficient level of detail so a reader who is unfamiliar with the City and the Project will understand the undertaking. Chapter 2 Organization & Staffing – needs to define roles of key staff/agencies and how they interrelate (job descriptions, resumes as appendices), e.g. how safety, quality personnel interface within the project organization.

Vacancies. Plans/schedules for filling. How the organization anticipates changing as the implementation of the project proceeds. The plan should show how a procurement action will proceed through the system, e.g. change orders. The PMOC recommended that the City use Miami-Dade's PMP as an example.

BMP. The plan should describe in more detail the two Divisions under current operations. Peak load capacities – the City should describe the effect of the move to low floor buses (resulting in reduced number of seats) on the vehicle fleet size. The City could extract more detail from the NTD fleet management report - boardings, passenger miles, vehicle miles, etc. The plan should provide more detailed information, e.g., daily peak loads rather than just annual lump sum. The City needs to discuss the basis for its assumptions concerning service and ridership changes. The PMOC found no reference to unscheduled maintenance, mean distribution between failures, fleet defects, etc., which the PMOC recommends the City add as well as a cross reference to the finance plan for capital expansion and operations.

The PMOC Team provided:

- \* Sample schedules for New Starts project delivery (Connecticut DOT and New Britain-Hartford Busway);
- \* A checklist of deliverables for Technical Capacity and Capability to Enter PE, and
- \* Offered electronic files of additional examples of PMPs, BMPs

The PMOC Team noted, regarding the System Safety Management Plan, that FTA is scheduled to finalize by August 1, 2007 specifics on what must be in the Plan to enter PE (can be a Chapter in PMP or separate plan).

**June 14, 2007: Exit Briefing, 8:00 a.m.–10:00 a.m.**

The PMOC Team provided copies of and discussed their draft monitoring report to FTA.

## **MEETING ATTENDANCE LISTS**

### **Pre-PMOC Meeting - June 11, 2007, 2:00 p.m.–3:45 p.m.**

#### Attendees:

Melvin N. Kaku, Director, Department of Transportation Services (DTS)  
Toru Hamayasu, DTS Chief Planner  
Faith Miyamoto, DTS Environmental Planner  
Phyllis Kurio, DTS Transportation Planner  
Michael Schneider, InfraConsult Principal  
Simon Zweighaft, InfraConsult Project Manager  
William Stead, InfraConsult Engineering Manager  
Douglas Tilden, InfraConsult Architectural Manager  
Sue Tilden, InfraConsult Land Use Manager  
Mark Scheibe, Parsons Brinckerhoff Quade and Douglas (PBQD) Project Manager –  
Alternatives Analysis (AA)  
Clyde Shimizu, PBQD Engineer – AA  
Donald R. Durkee, PBQD Subconsultant

### **PMOC Meeting - June 12, 2007, 9:00 a.m.–3:00 p.m.**

#### Attendees:

Raymond Sukys, Director of Planning, Federal Transit Administration, Region IX  
Frank McCarron, PMOC, BAH  
Scott Kiefer, PMOC  
Bob Mowry, PMOC  
Justine A. Belizaire, PMOC, BAH Task Order Manager  
Simon Zweighaft, InfraConsult Project Manager  
William Stead, InfraConsult Engineering Manager  
Douglas Tilden, InfraConsult Architectural Manager  
Sue Tilden, InfraConsult Land Use Manager  
Michael Schneider, InfraConsult Principal  
T.W. “Wes” Mott, InfraConsult Finance & Administration Manager  
Melvin N. Kaku, DTS Director  
Toru Hamayasu, DTS Chief Planner  
Faith Miyamoto, DTS Environmental Planner  
Phyllis Kurio, DTS Transportation Planner  
Mark Scheibe, PBQD Project Manager – AA\*  
Clyde Shimizu, PBQD Engineer\*  
Donald R. Durkee, PBQD Subconsultant  
\*Project Delivery Workshop only

**PMOC Meeting - June 13, 2007, 10:00 a.m.–1:00 p.m.**

Attendees:

Raymond Sukys, Director of Planning, Federal Transit Administration, Region IX  
Frank McCarron, PMOC, BAH  
Scott Kiefer, PMOC  
Bob Mowry, PMOC  
Justine A. Belizaire, PMOC, BAH Task Order Manager  
Simon Zweighaft, InfraConsult Project Manager  
William Stead, InfraConsult Engineering Manager  
Sue Tilden, InfraConsult Land Use Manager  
Toru Hamayasu, DTS Chief Planner  
Faith Miyamoto, DTS Environmental Planner  
Phyllis Kurio, DTS Transportation Planner  
Donald R. Durkee, PBQD Subconsultant

**PMOC Meeting - June 14, 2007, 8:00 a.m.–10:00 a.m.**

Attendees:

Raymond Sukys, Director of Planning, Federal Transit Administration, Region IX  
Frank McCarron, PMOC, BAH  
Scott Kiefer, PMOC  
Bob Mowry, PMOC  
Justine A. Belizaire, PMOC, BAH Task Order Manager  
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